

it. If it misses it runs rapidly in circles. Alarm pheromones are undoubtedly released. Nearby workers start to search, and almost immediately others will be attracted from the nest, until, if several *sanguinea* are caught, several hundred *fusca* may be involved.

The whole body advances in a similar fashion to *sanguinea*, but faster. Solitary *sanguinea* are attacked immediately and are overwhelmed by up to about six *fusca* that are attracted to the spot. Groups of *sanguinea*, particularly if further from the *fusca* nest, may not be attacked immediately. *Fusca* tend not to stop and greet each other — being rather wary, they usually run from any fast approaching object — but either by an awareness of movement, or by chemical means, they appear to realise if they will have support.

Fusca workers attack *sanguinea* by racing in and seizing a leg or antenna. They are strong enough to restrain most *sanguinea* for at least five or ten minutes. If they manage to grip the base of a leg, the *sanguinea* will still be hindered even after the *fusca* has been killed.

The *fusca* have the advantage of being near their nest, so re-inforcements arrive quickly. In the raids the author has observed, *fusca* numbers built up rapidly enough to completely overrun the advancing *sanguinea*, forcing them to flee, either towards their nest, or up into vegetation where they are less likely to be found. The *fusca* pursued them all the way back to the nest and seized several workers just outside it, but never attempted to enter it.

For several days afterwards the *fusca* constantly maintained a stronger than usual presence on and around the *sanguinea* nest, and attacked any that ventured out. Later this was reduced, the *sanguinea* site being within the foraging range of the other *fusca* colony. Aggressive *fusca* workers occasionally attack *sanguinea* foragers but usually they soon let go, or are killed, and other *fusca* rarely go to their aid if the colony is not threatened, particularly if the fight is near the *sanguinea* nest.

References

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An early Hummingbird Hawkmoth in Kent.

About midday on 4th March 1990 I was surprised to see a Hummingbird Hawkmoth, *Macroglossum stellatarum* L. flying along the top of the cliffs at Foreness Point near Margate in Kent. It was under observation for some five minutes during which time it made a series of quick dashes followed by periods of hovering as though it was searching for flowers which were rather sparse at this early date.— ERIC G. PHILP, 6 Vicarage Close, Aylesford, Kent ME20 7BB.